

The Builder.

No. CCLVIII.

SATURDAY, JANUARY 15, 1848.



HE distressing accident which happened at the Euston-square Railway station on Thursday, in last week, is probably known, through its fatal results, to most of our readers.

Works of very great magnitude are going on there, under the direction of Mr. Hardwick, the Company's architect, including a grand passenger-hall, about 120 feet long, 60 feet wide, and of considerable height, on which, if we are rightly informed, many thousands of pounds are to be spent. At one end of this fine apartment, the inclosing wall, of great thickness, was carried on a range of columns 2 ft. 4 in. in diameter, and 20 ft. high, formed in brickwork, to be covered with cement. This wall it was that came down (shattering a number of the workmen in its fall, one of whom, John Shea, a labourer, afterwards died), notwithstanding that, according to the evidence, it was erected in the best manner, and of the best materials,—a statement we should believe, as Mr. William Cubitt is the contractor employed. In which part of the construction the failure occurred, or what was the cause of it, appears not to be known, at least it was not elicited at the inquest, which was held on Monday, to inquire touching the death of the labourer who was killed. Indeed the inquiry was altogether of a very unsatisfactory character, and ought not to pass without severe comment.

It is most important for the interests of science, as well as for the sake of the public, that such an occurrence should be fully investigated to the utmost, and satisfactorily explained, whereas on the present occasion it has obviously been unwarrantably slurred over: no evidence was taken that can be in any degree satisfactory to the public, and no real attempt was made to arrive at a knowledge of the cause of the accident. Even the principals themselves were not examined, still less any impartial scientific men, possessing the confidence of the public, who ought unquestionably to have been called in to aid the inquiry.

We cannot avoid saying, that both the deputy-coroner, Mr. G. T. Mills, who presided, and the jury, stopped far short of their duty.

The only witnesses called were the men employed on the building, and Mr. Bavin, the architect's clerk of the works: we will give the material parts of their evidence.

John Hickman, a bricklayer, stated that he was at work at the time of the accident, upon a scaffold several feet from the ground. He was just about laying the top row of bricks upon the wall, when he suddenly observed the wall to bulge in the centre; he sprang from the scaffolding and escaped with a few bruises. He believed the whole of the work to be sound and firm, both as it regarded the quality of the materials and the excellence of the construction of the whole work. Could not account for the accident.

James Stevenson, foreman of the bricklayers, said the portion which had fallen consisted of a strong foundation-wall 7 feet wide, on which was a common pedestal of the like width, built

crossways to the wall to receive pillars, upon the top of which latter an entablature and further wall was to be placed. The pedestals and pillars were the best kind of brickwork, put up with cement. The pedestals, the pillars on which had given way, were begun on the 21st of October, and finished on the 30th. On the 11th of November the columns were begun, and on the 22nd of that month they were ready to receive the entablature, with the upper portion of the wall. The pillars were eight in number. They were built in twos, about 20 inches apart, and there was a space of 7 feet between each pair. They were connected on the top by iron tension-rods, on which the entablature was placed.* None but the best workmen were employed in constructing the pillars; 5s. 6d. per day wages was paid to them. None of them had ever complained of the work being proceeded with too hastily. Witness could not account for the accident, and should have no objection to build from the same drawings again. He considered brick pillars in such a building perfectly safe, and his impression was that the superincumbent wall and not the pillars had given way first. The arches were begun on the 11th of December.

The coroner asked, Why a solid wall was not raised instead of the pillars, and witness replied, He couldn't say.

The coroner might as well have inquired why an opening is left for a door, or a breasting put in for a shop front.

The witness continued,—He could not say positively, but should think the wall gave way about the centre: why it should do so couldn't tell.

Robert Batterwick, a foreman, said, though the works were done by contract, as between Messrs. Cubitt and the railway company, they were not so as regarded the men. He had never been apprehensive of danger, nor could he account for the accident. The columns were 2 feet 4 inches diameter, and 20 feet high. Between them and the outer wall of the building ran a gallery communicating with the various rooms in the station. Witness could suggest nothing calculated to prevent a similar accident. Witness did not think the works had been hurried, and, according to common calculations, the columns were sufficient to bear five times the weight they had upon them. The brickwork and masonry in all the new erections, at the Euston-square station, were of the most substantial character. Couldn't tell what occasioned the accident. Had not heard any opinion expressed as to the cause of it.

In reply to questions put to him, said the new building was to be erected on the same principle, but that some little difference might be made. Had seen columns built proportionably large, but never of that magnitude. Thought the plan was good.

Christopher Bavin, Mr. Hardwick's clerk of the works, produced a section of the building. It was his duty to overlook the works; he had done so, and had never discovered cause for complaint. In rebuilding the wall he should proceed precisely on a similar plan, and should not advise the use of stone instead of brick in the construction of the pillars.

The coroner remarked that if the building was to be put up again in the same way, it appeared a startling fact that the architect did not know how to act to prevent the recurrence of such an accident?

* In what condition, after the accident, were these rods found?

A "startling fact" indeed, if it were true; but on what ground the remark was made does not appear. The architect himself might at all events have been asked if this were really the case.

The coroner having suggested that possibly the wall started in consequence of some shock, Mr. Bavin said, that his impression was, that it was from some sudden displacement of the scaffold, from the snapping of a cord. The vibration of the scaffold would act upon the wall, and, perhaps, this might result in the downfall of it.

The coroner, in summing up, said, that if the jury felt satisfied, they might return a verdict to the effect that they had no evidence as to the cause of the accident; but if they desired to have the opinion of any impartial scientific man, he was quite ready to adjourn for that purpose. [He ought indisputably to have called for it himself.] It must, however, be borne in mind, he continued, that prudence was the result of experience, and, though improvements in the construction of similar works for the future might probably be suggested, still that would be no ground for imputing blame in the present instance.

The jury were of course satisfied to the extent suggested,—namely, that "how the wall fell there was not sufficient evidence to prove," and so included those words in their verdict as the quickest way of getting rid of the business. It does not appear to have occurred to them that it was their bounden duty to make every effort to obtain "sufficient evidence" of how the wall fell: for, so far from doing so, they omitted taking the most ordinary and obvious means of arriving at the truth.

All our readers will, we are sure, agree in thinking that this inquiry was conducted in a strikingly unsatisfactory manner, and that a further investigation is not merely most desirable, but should be insisted on. The position of both the architect and the builder (for whom we have great respect) places them so far beyond cavil, that our remarks cannot be supposed to have any personal reference, and enables us to call the more strongly for further information without fear of having our motive misinterpreted.

PROFESSOR COCKERELL'S LECTURES ON ARCHITECTURE.

THE lectures on architecture, at the Royal Academy, which were omitted last year, were resumed on Thursday, the 6th inst. The professor devoted his attention mainly to one or two points, alluded to incidentally in former lectures, but upon which he now dwelt with some stress. In introducing his subject, he described the view which he took of the purpose of these lectures, in which he was guided by the law of the Academy, and said that, having devoted a life to the subject, he endeavoured to expound those theoretical canons which are to be sought for in the examples of architecture. Thus, one year he had treated of the history of the art by its monuments, when he had first exhibited to them the large drawings of buildings in all parts of the world, and of all ages, and the large sheet of plans, drawn to the same scale; looking at which, he might use the words of Napoleon, when addressing his troops before the Pyramids:—"Quarante siècles vous contemplent." These were the materials for the practice of the art; and without such they could do little:—as Sir Joshua Reynolds had said, "Nothing can come of nothing." In another course he had treated of the laws and principles of composition, which were most important parts of the studies required by his hearers, for though fashions were changing, and science constantly contributing to the resources of the architect, still these laws would be unaltered whilst the law of gravitation continued to